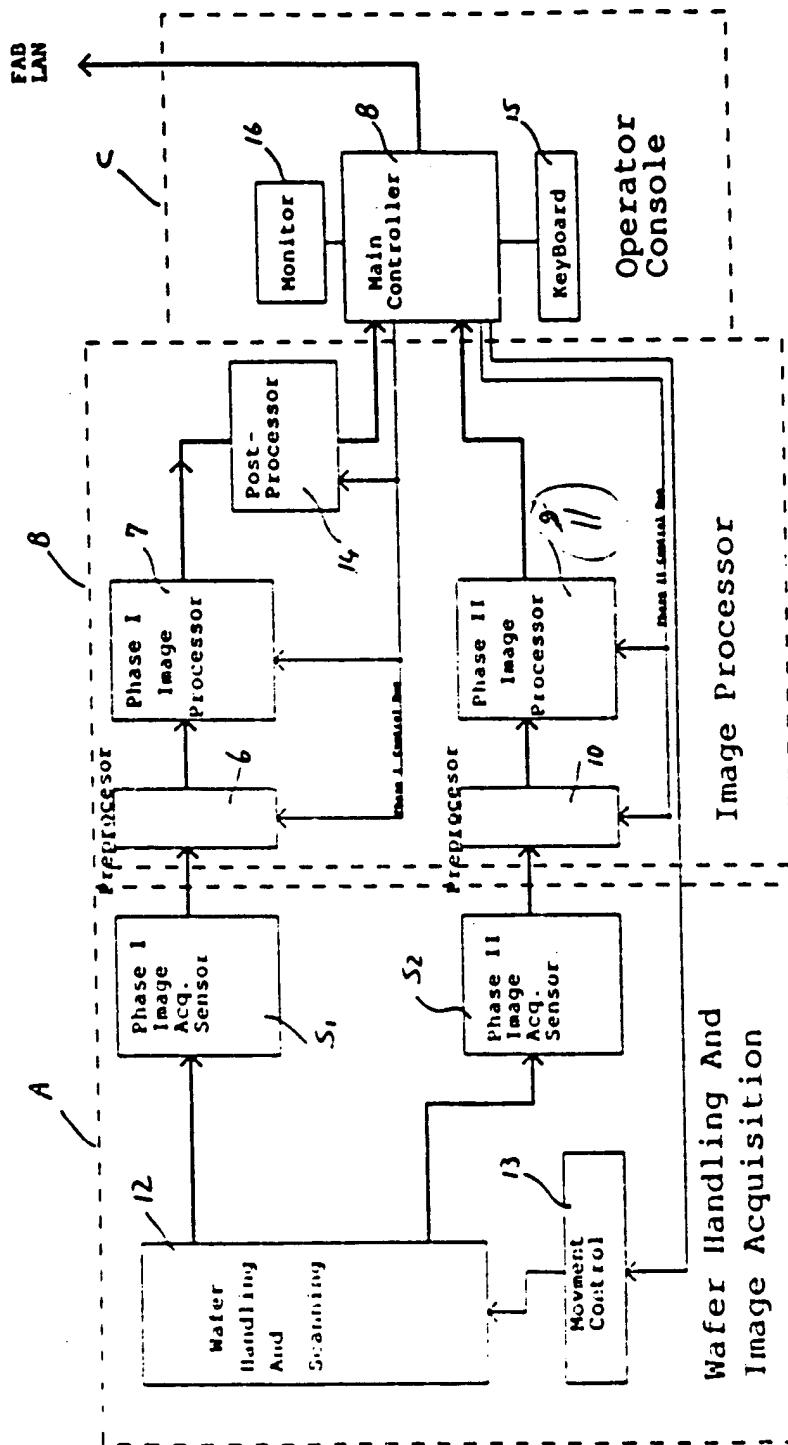


$\frac{1}{4}$

Fig. 1





System Block Diagram

Fig. 2

11-790871

Fig 3

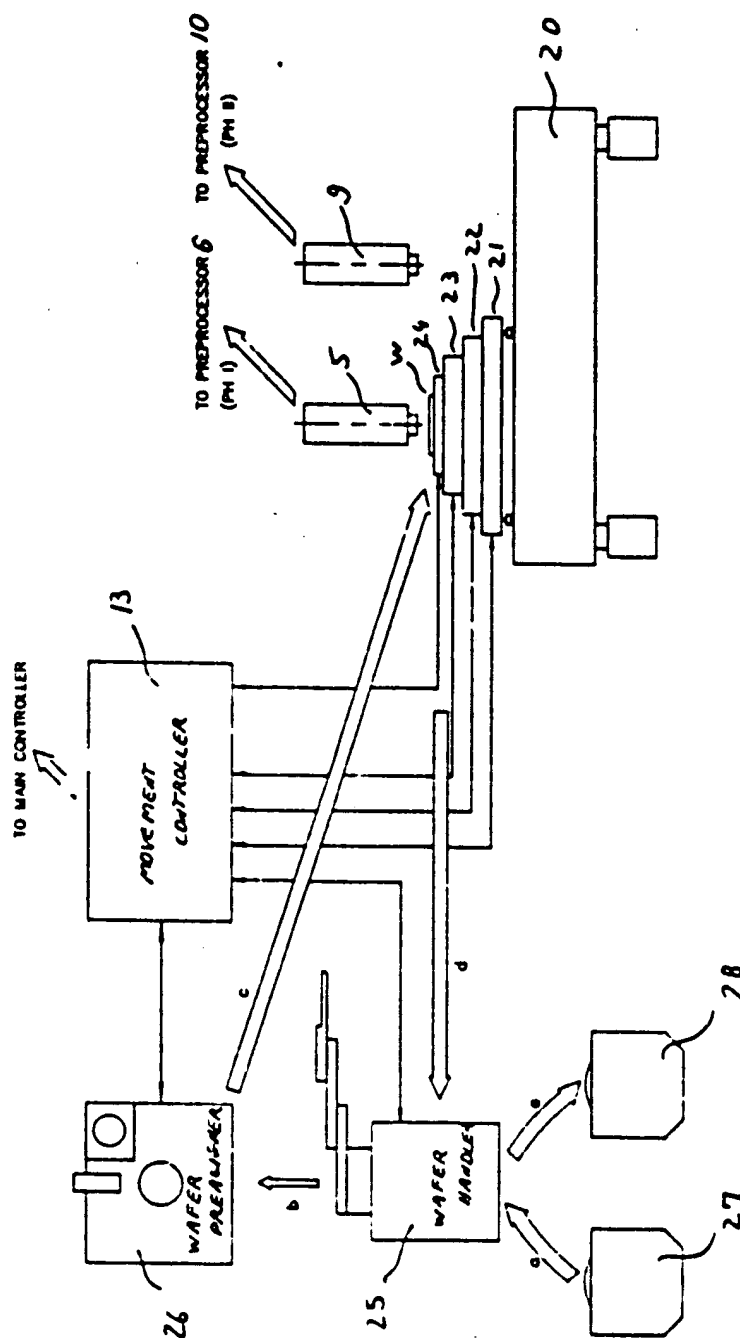


Fig 5

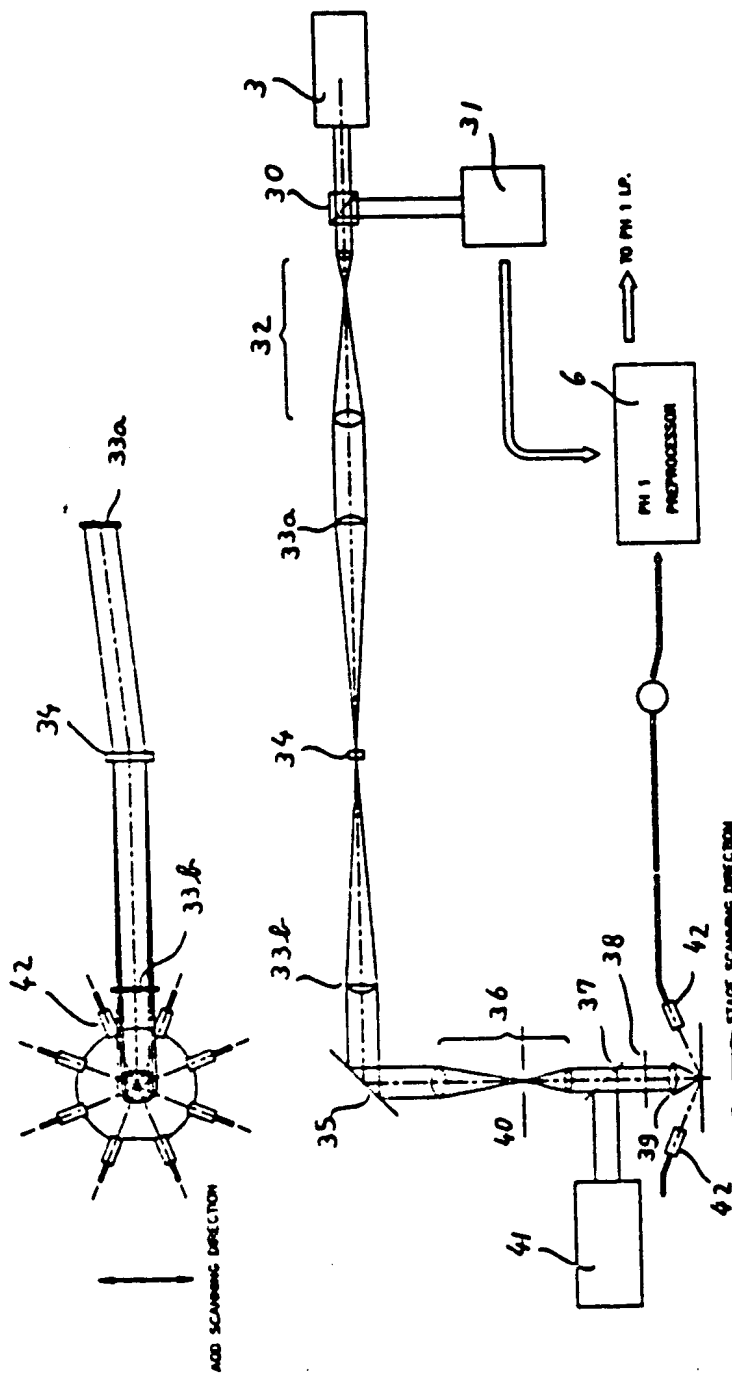


Fig. 4

11/790871

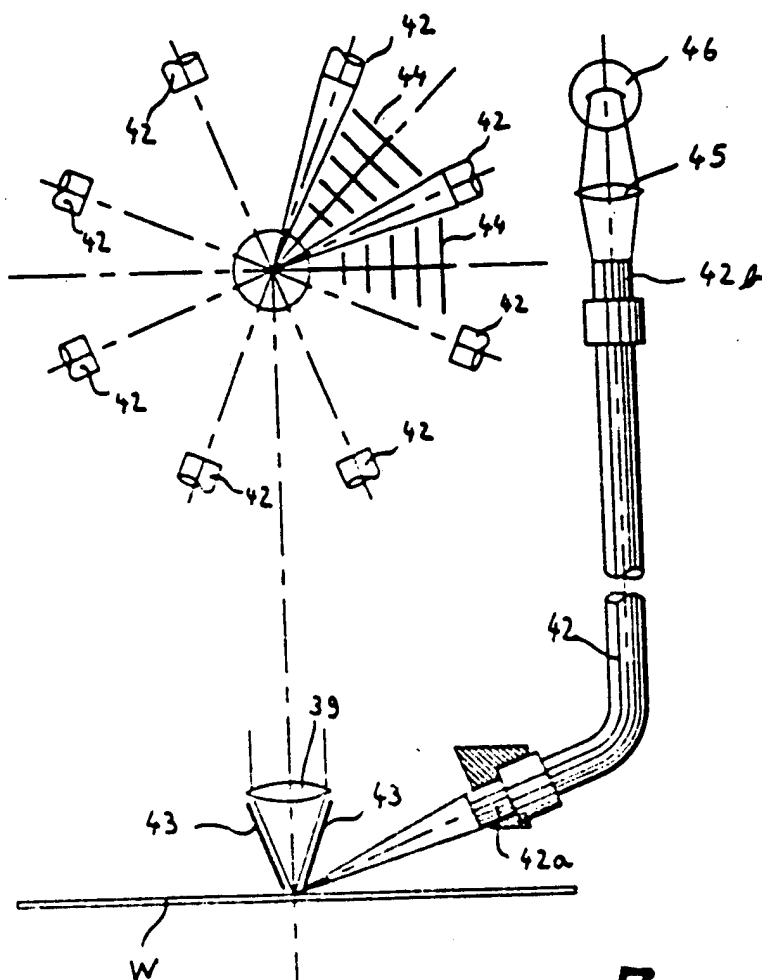
Fig 6Fig. 7

Fig 6a

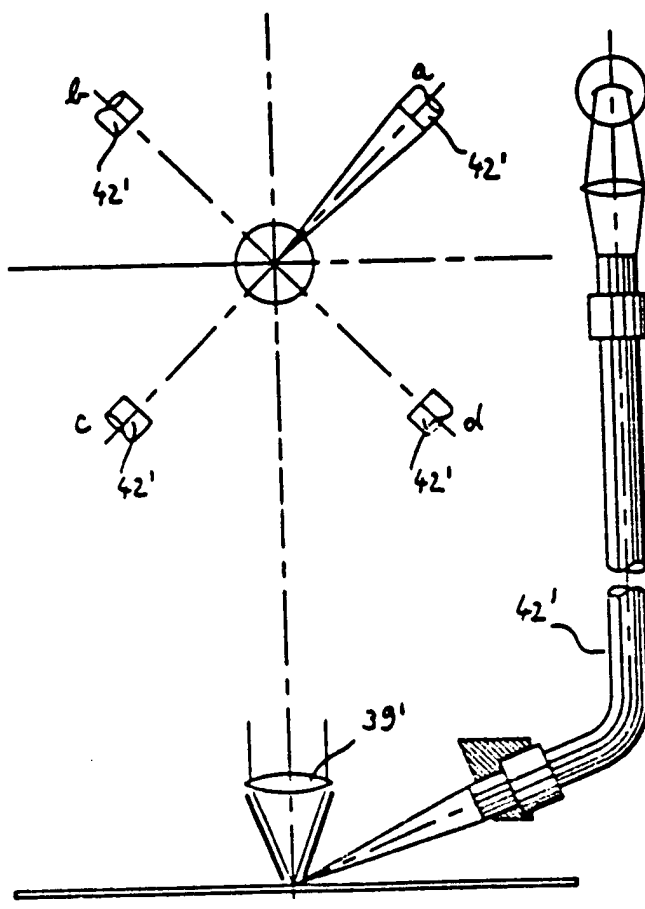
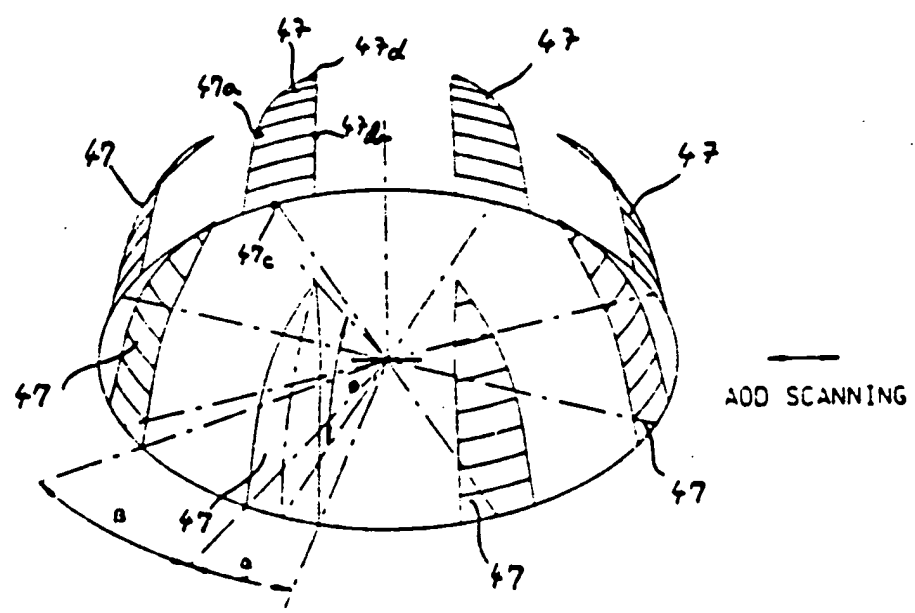


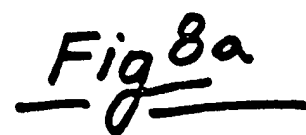
Fig 7a

11/790871

Fig. 8



08984558 120397



SECRET

9/41

11/790871

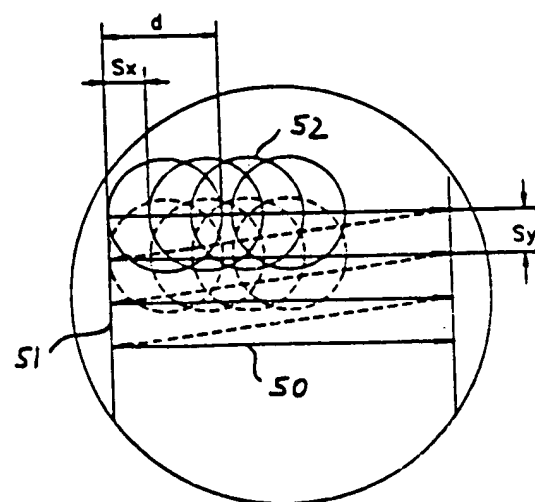
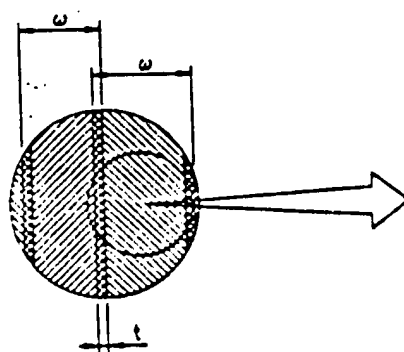
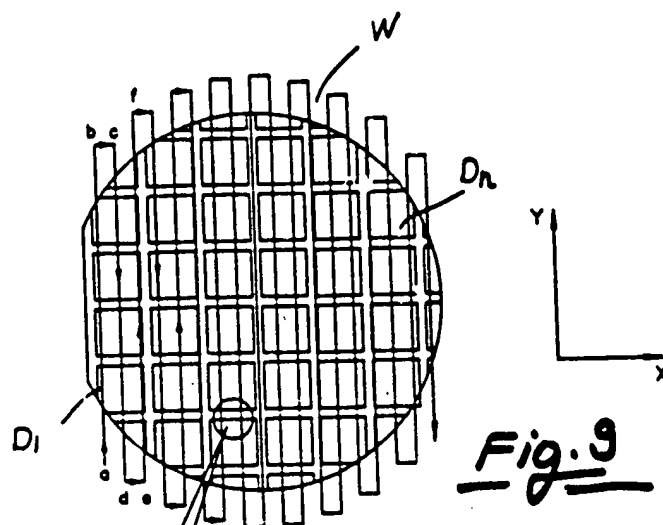
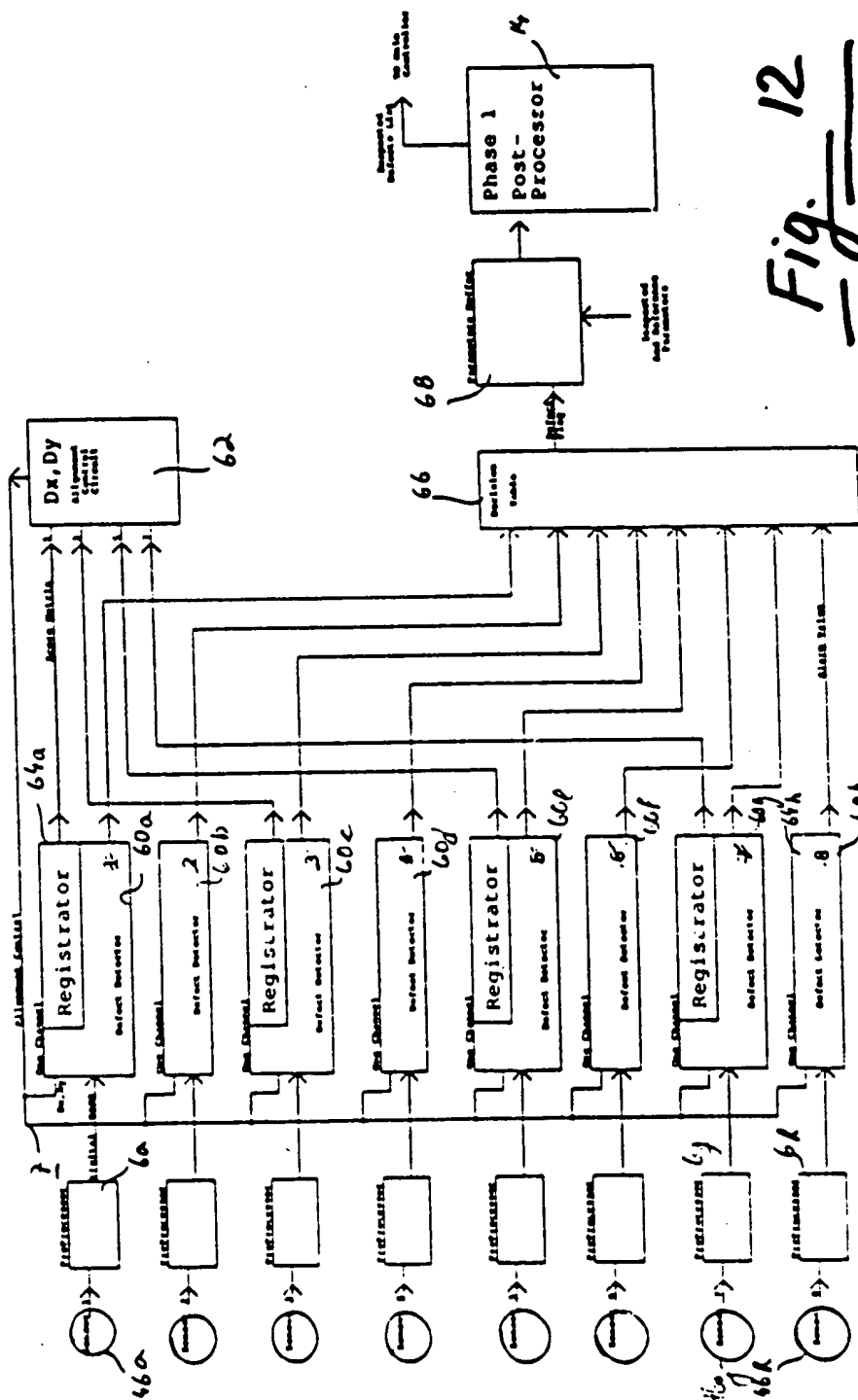


Fig. 12



SECRET 8548680

11/41

11/790871

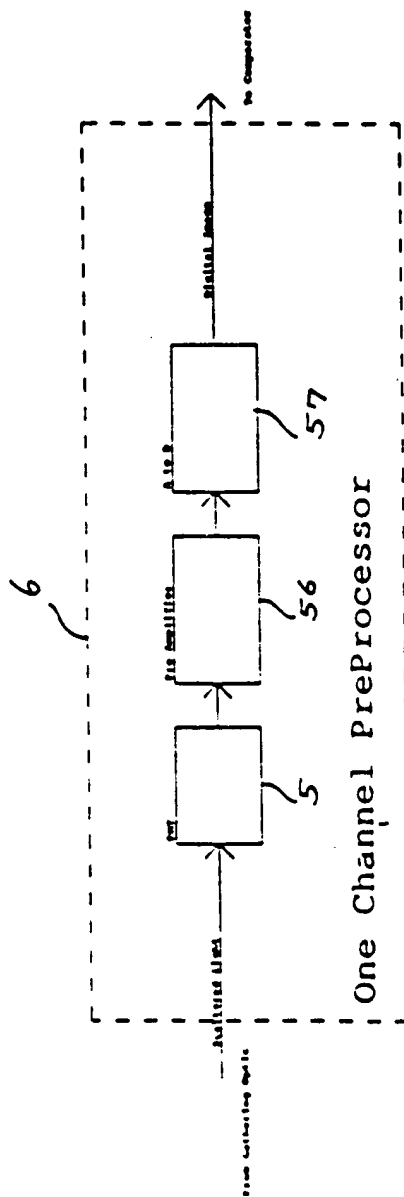


Fig. 13

11/790871

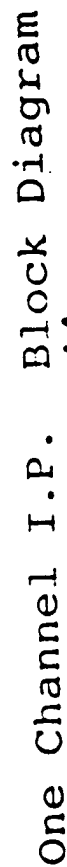


Fig. 14

11/790871

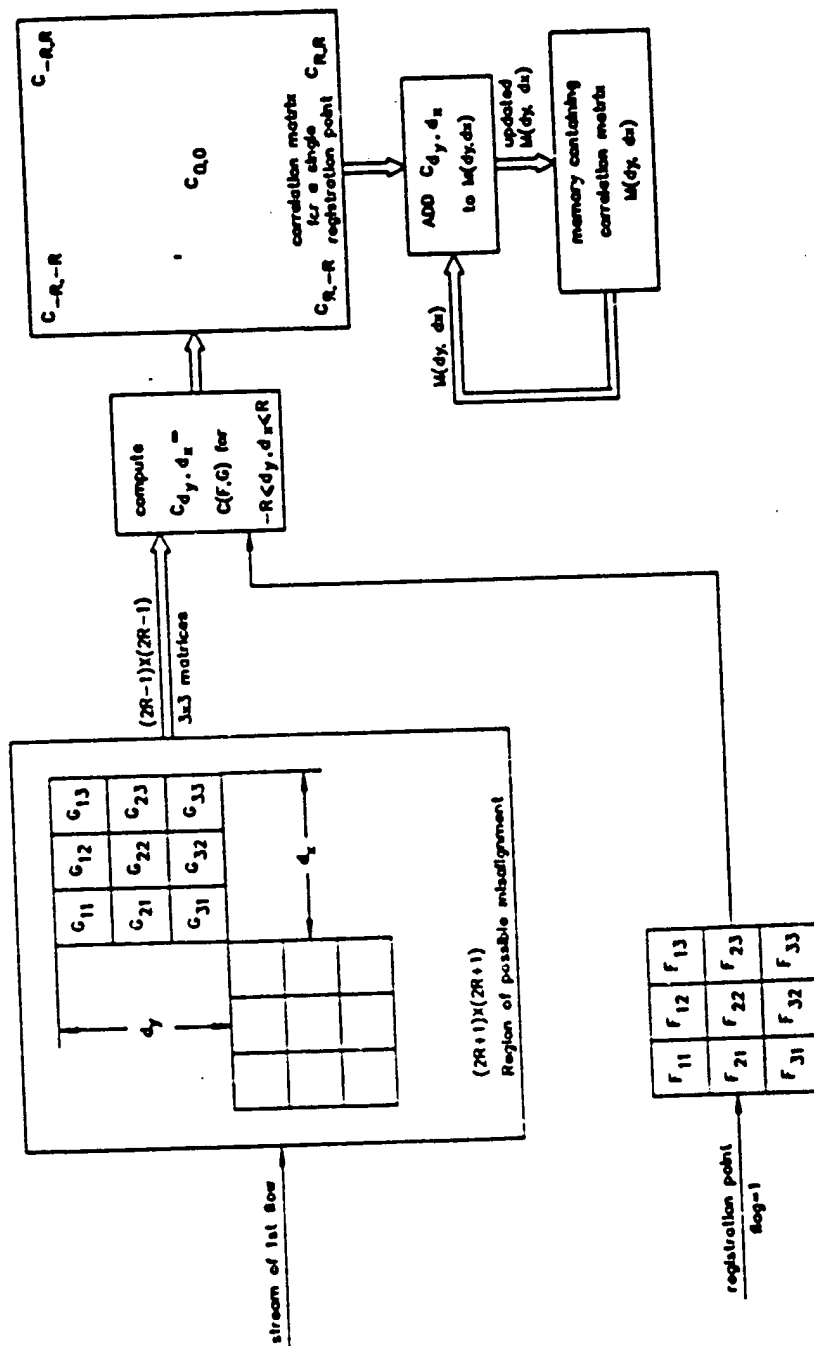
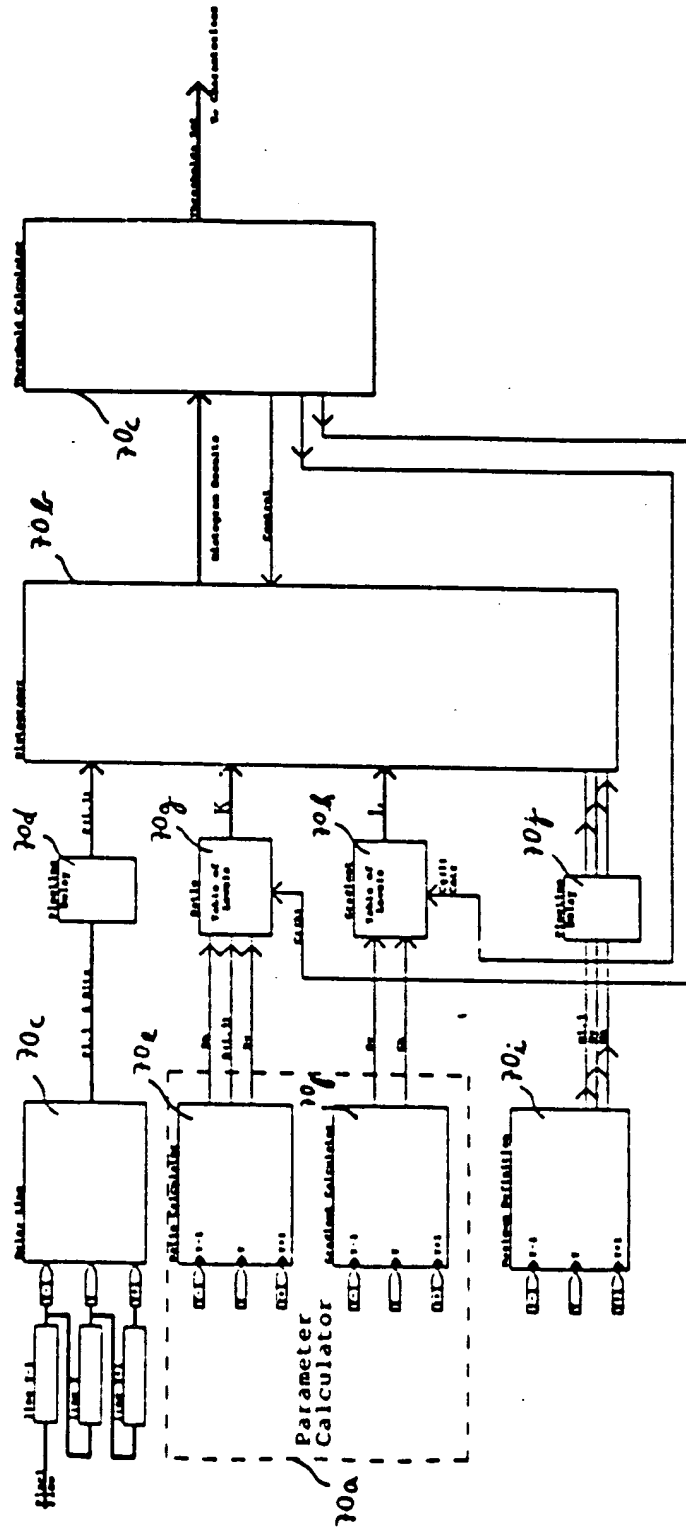


Fig. 14a

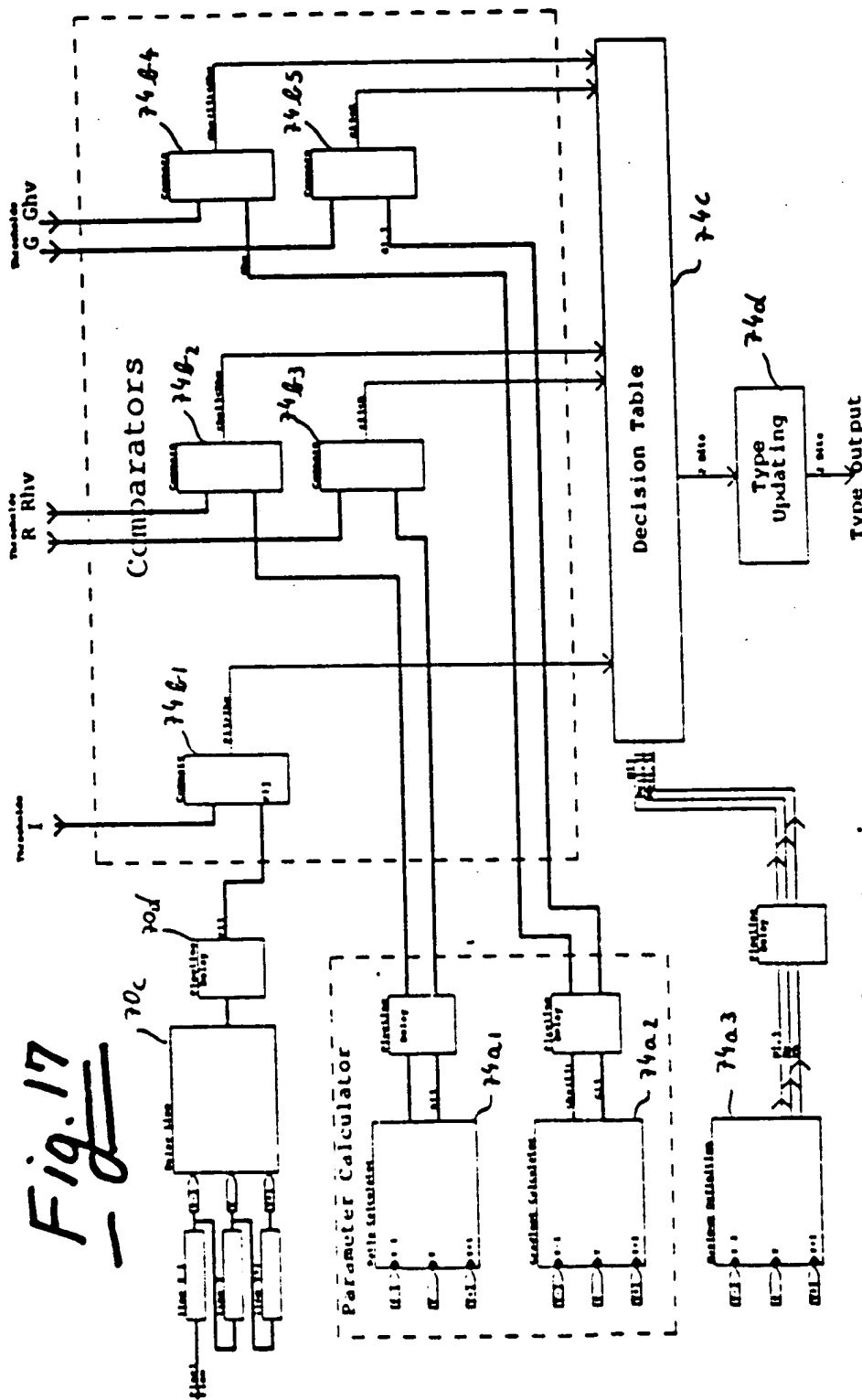
11/790871

15/41



Threshold Processor Block Diagram

Fig. 16



Pixel Type Characterizer

11/790871

12/44

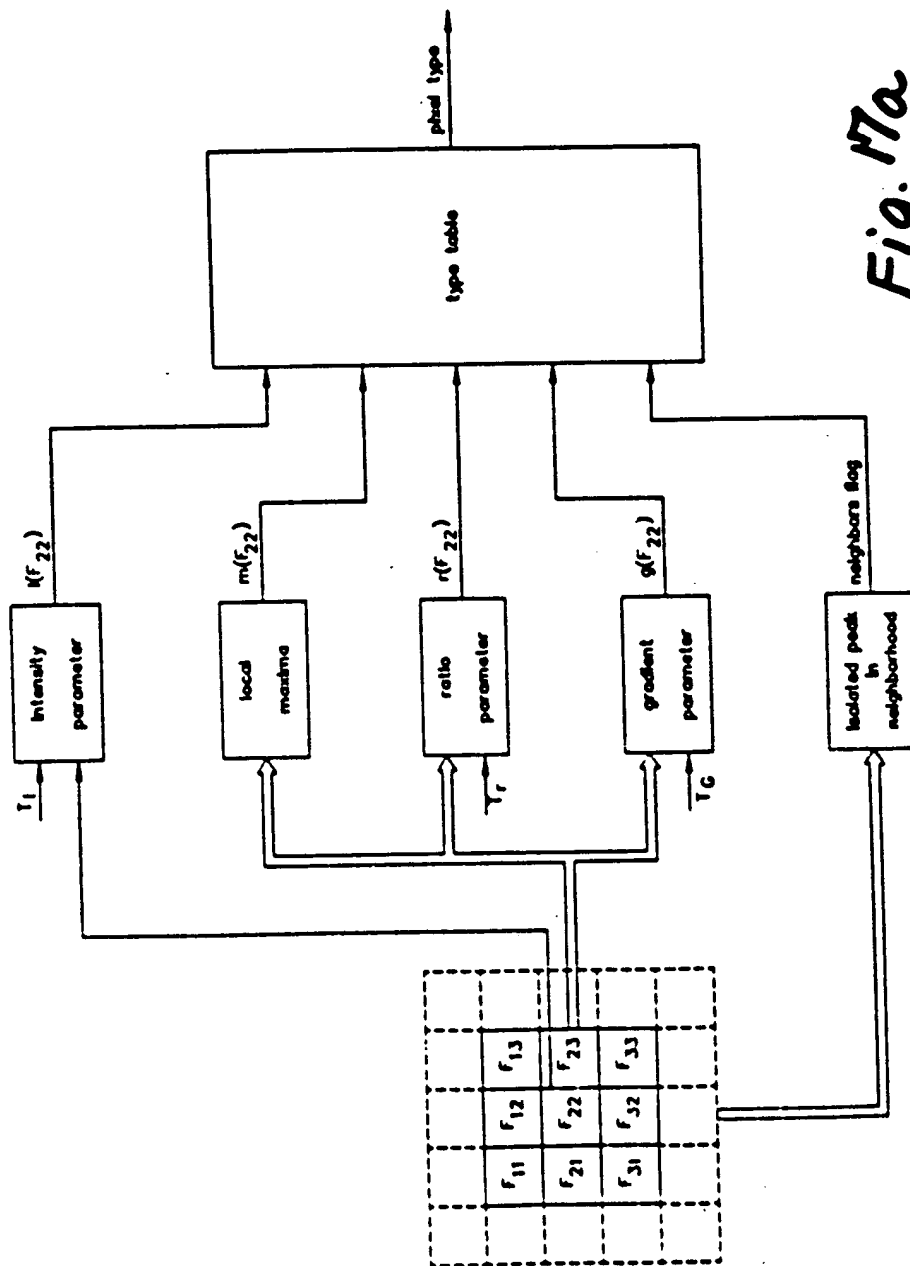


Fig. 17a

Fig. 21a

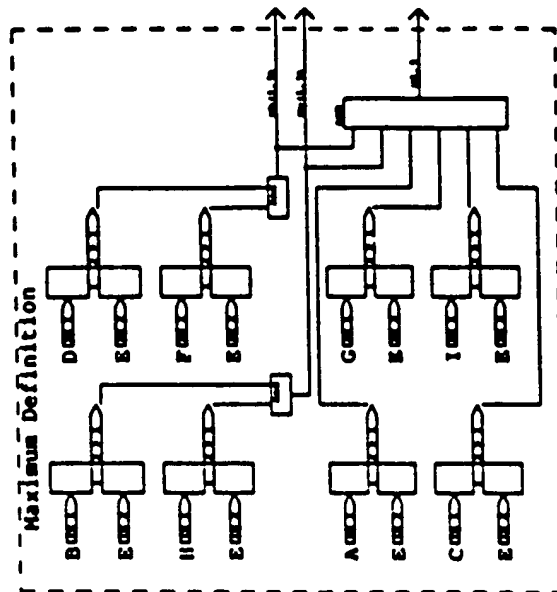
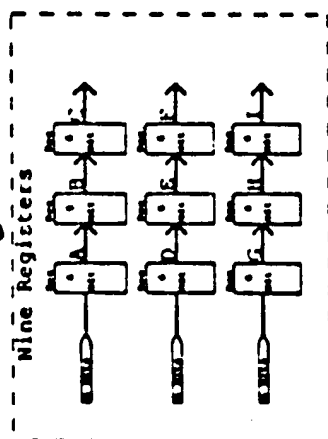
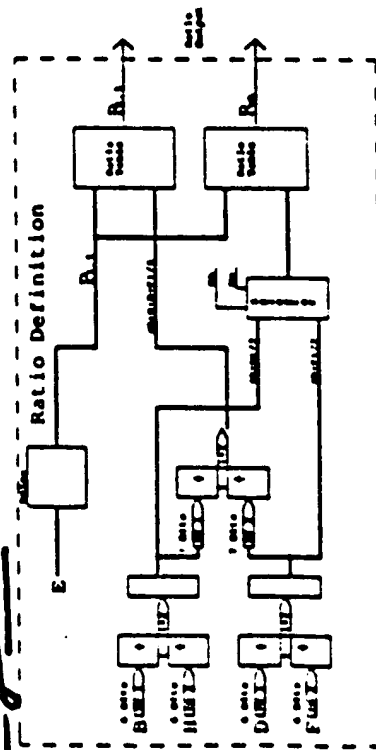


Fig. 20

Fig. 18



Ratio And Maximum Definition

11/790871

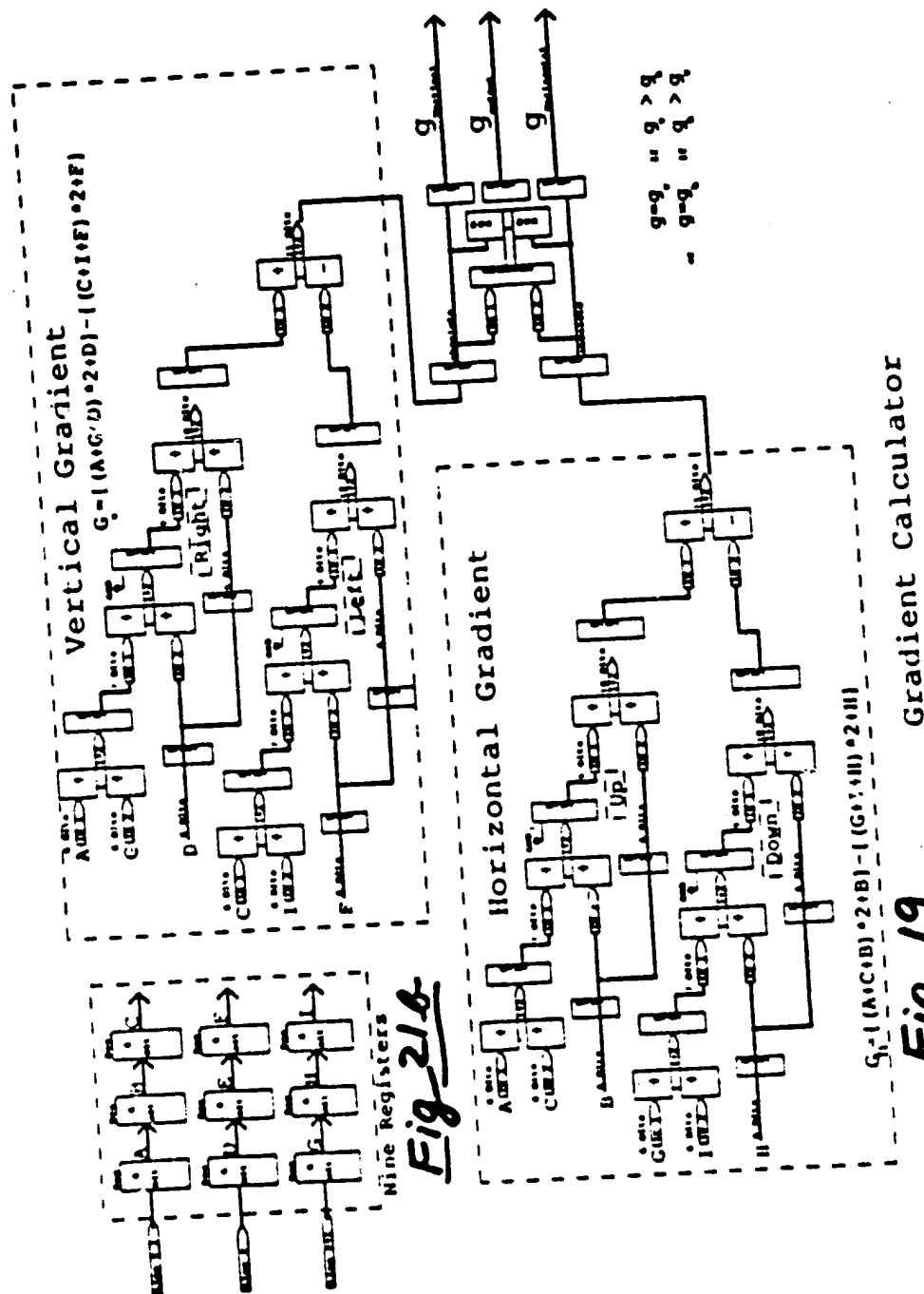
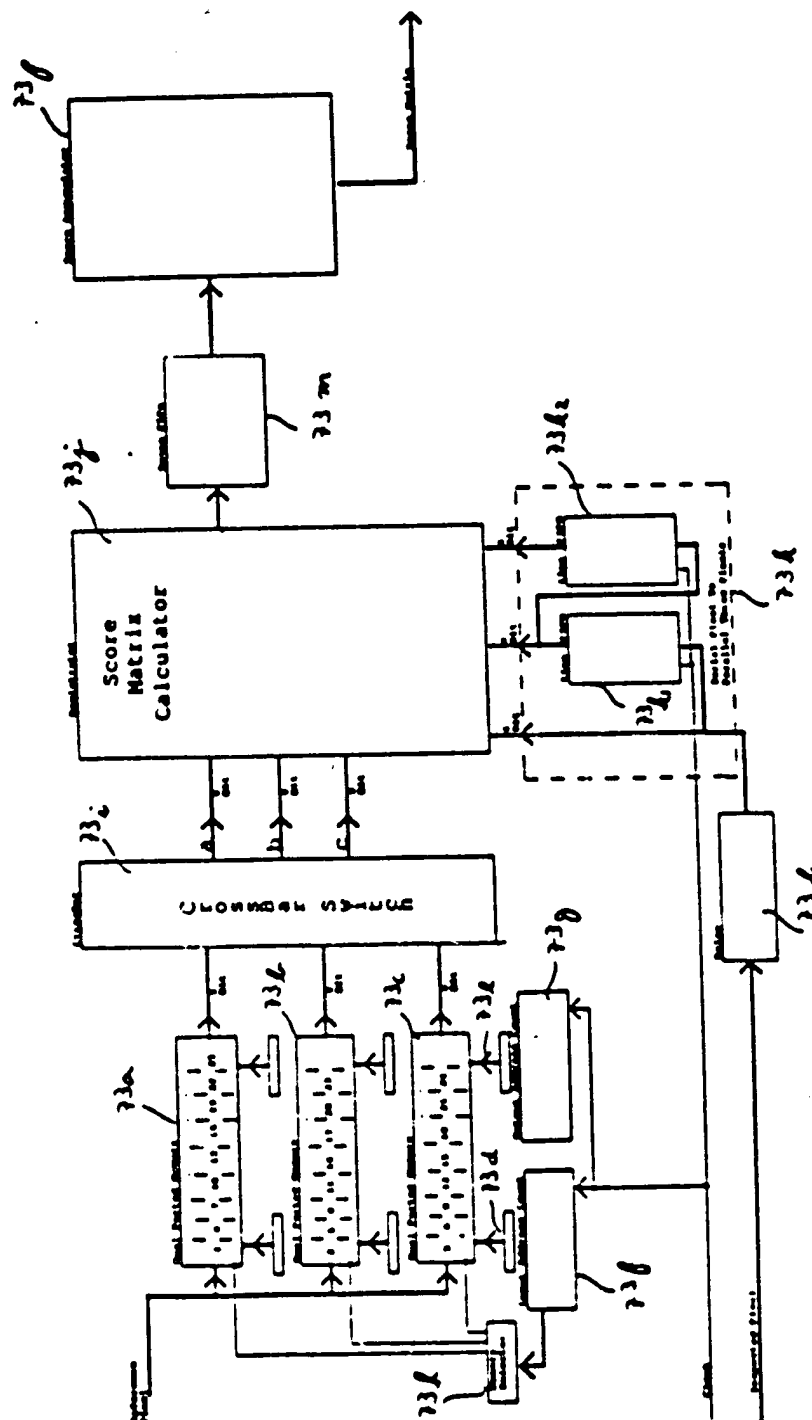


Fig. 21a

Fig. 19

11-790871

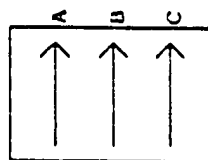
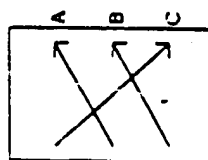
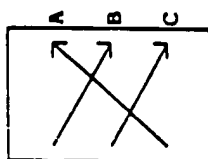


Registration Score Matrix Calculator

SECRET 35548680

21/41

11/790871



CrossBar Switch Combination

Fig. 22a

11/790871

Fig. 23

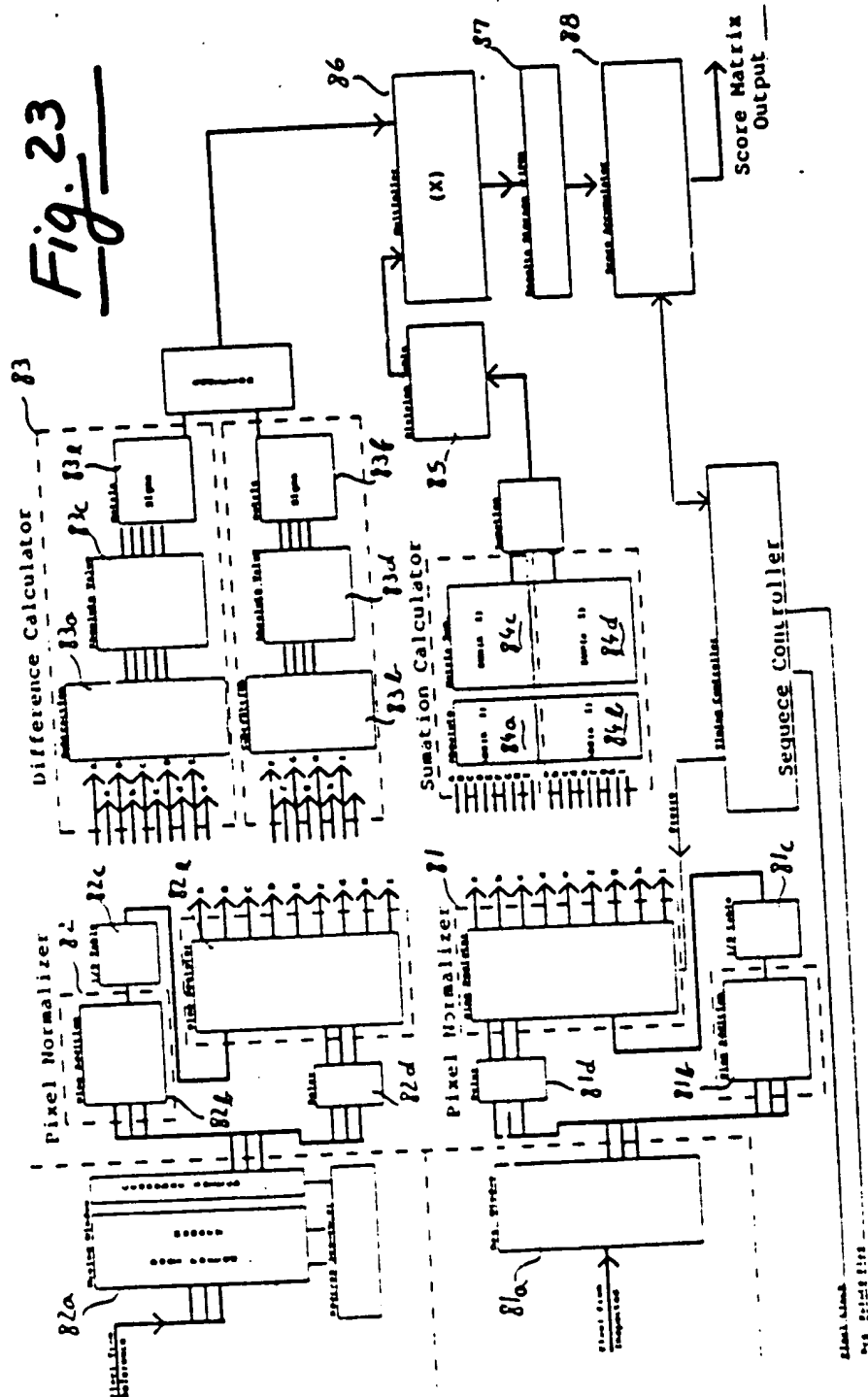
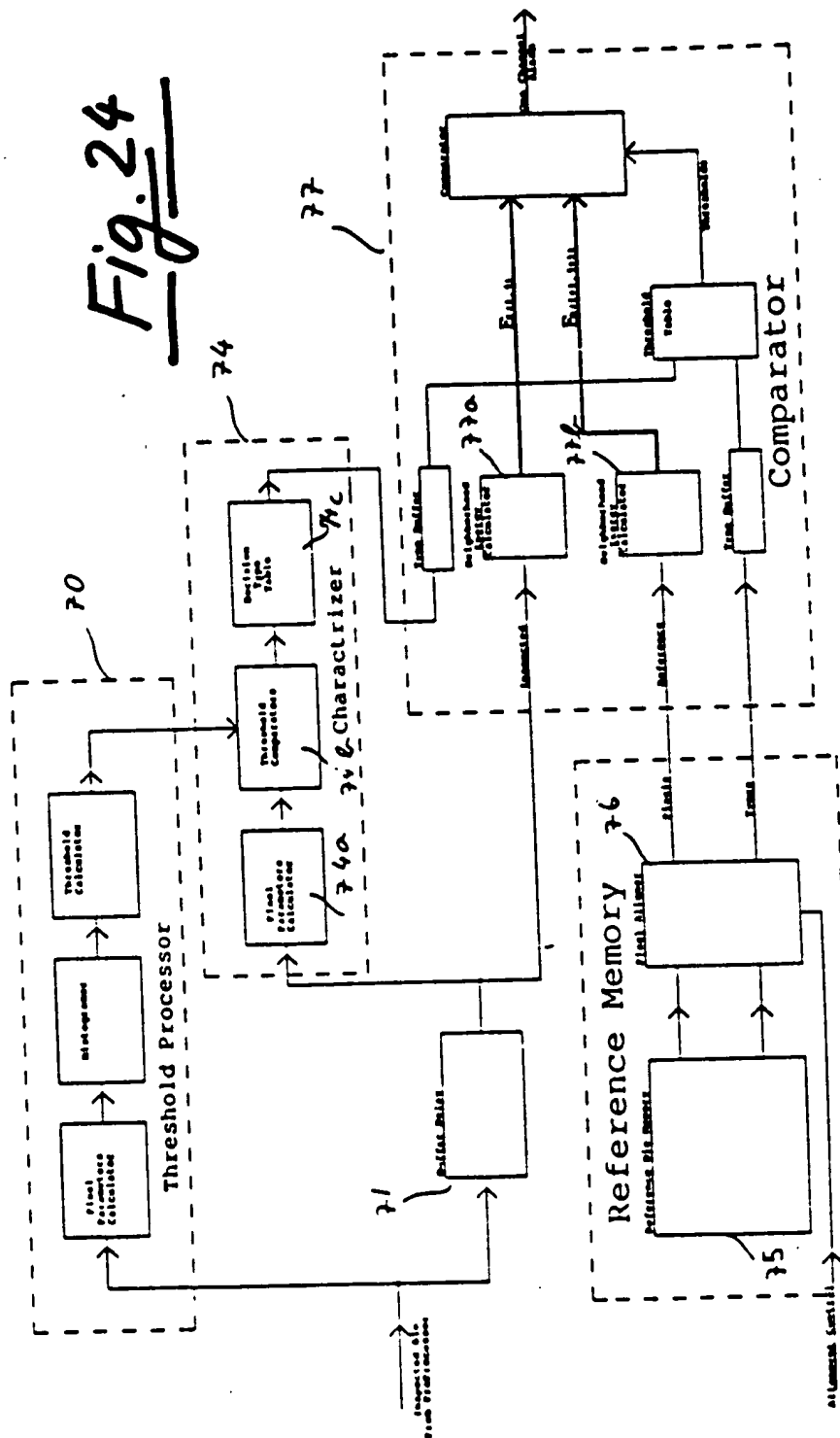
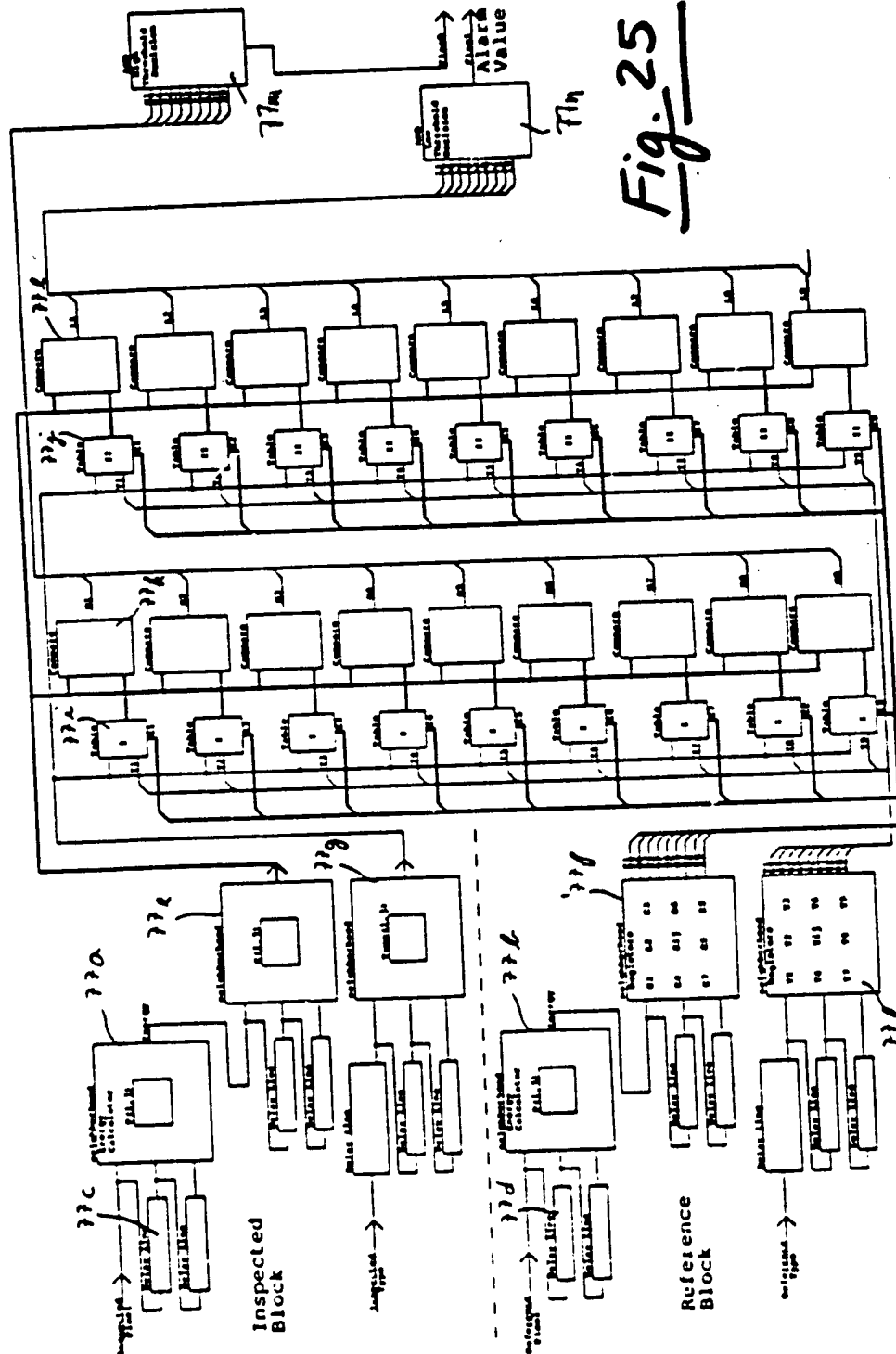


Fig. 24



Defect Detector Block Diagram



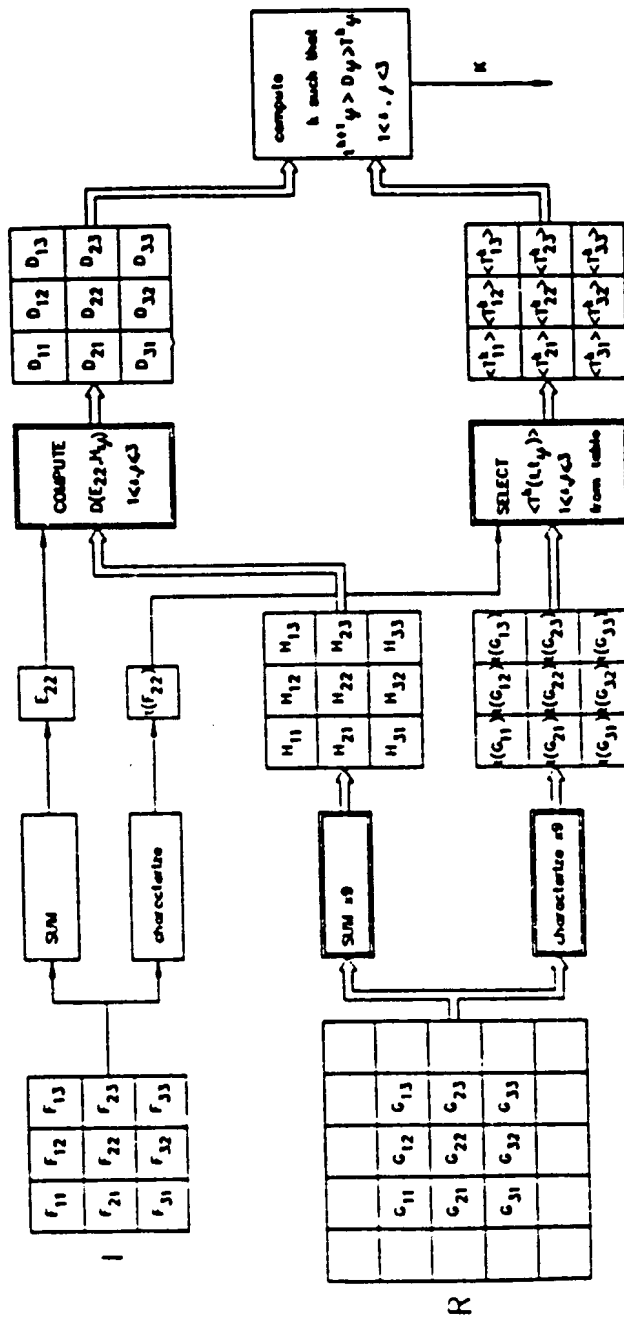


Fig. 25a

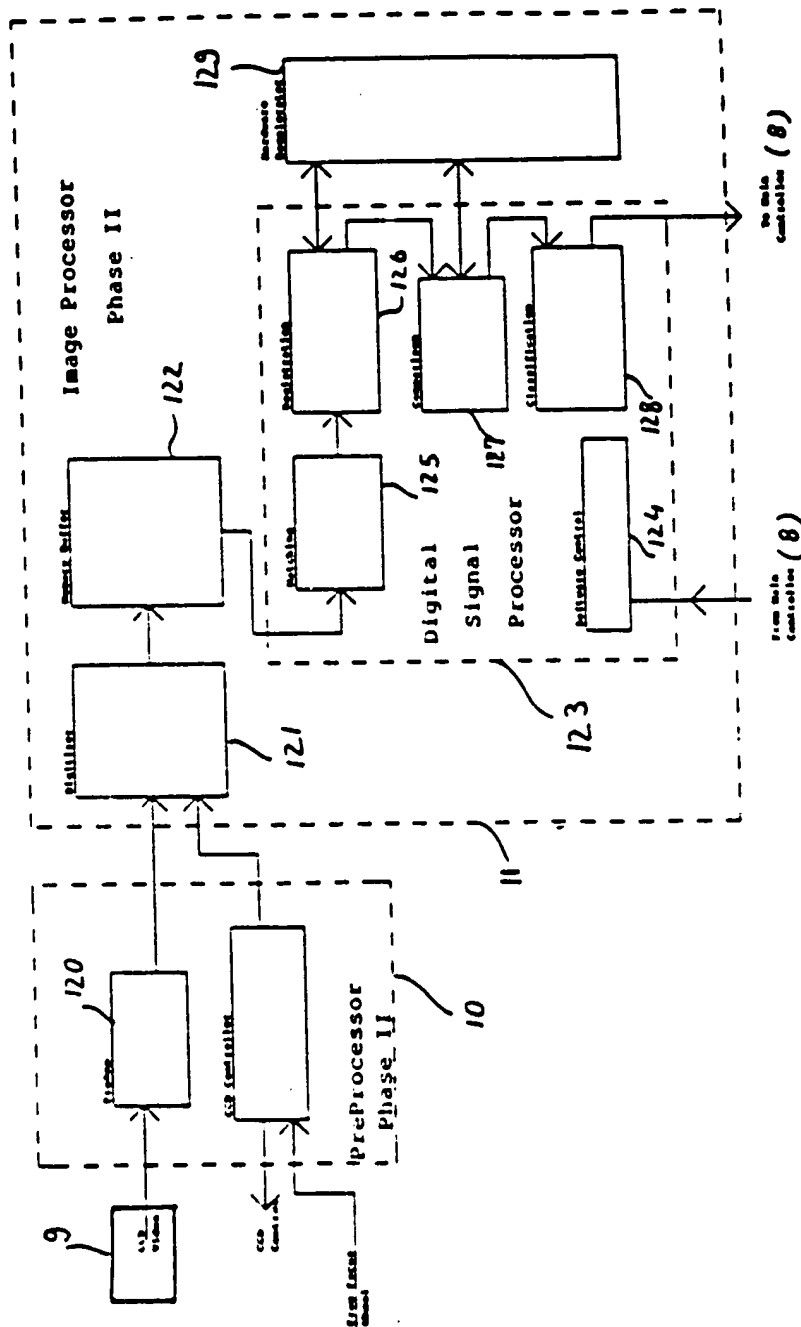


Fig. 27

SECRET 854853D

11/790871 28/41

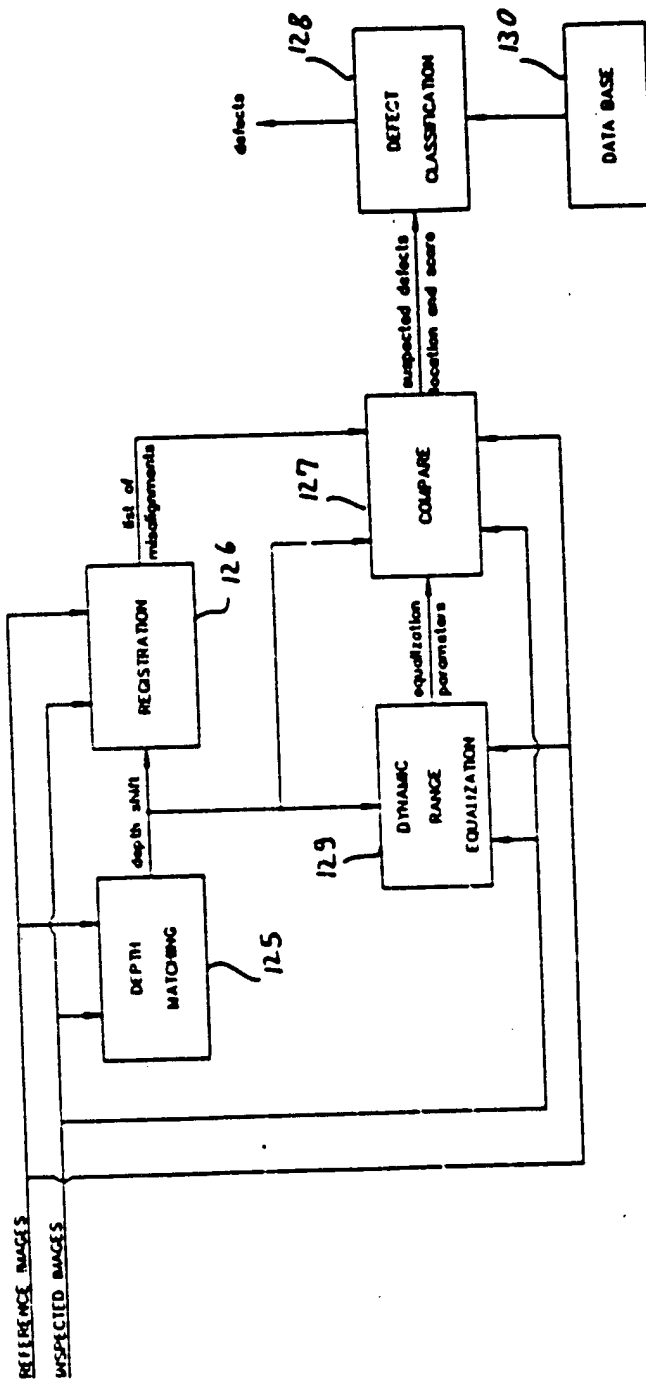
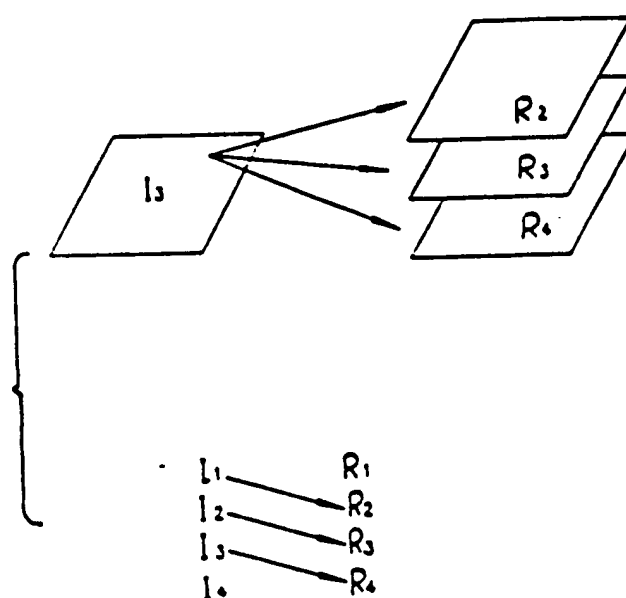


Fig. 28

Fig. 29



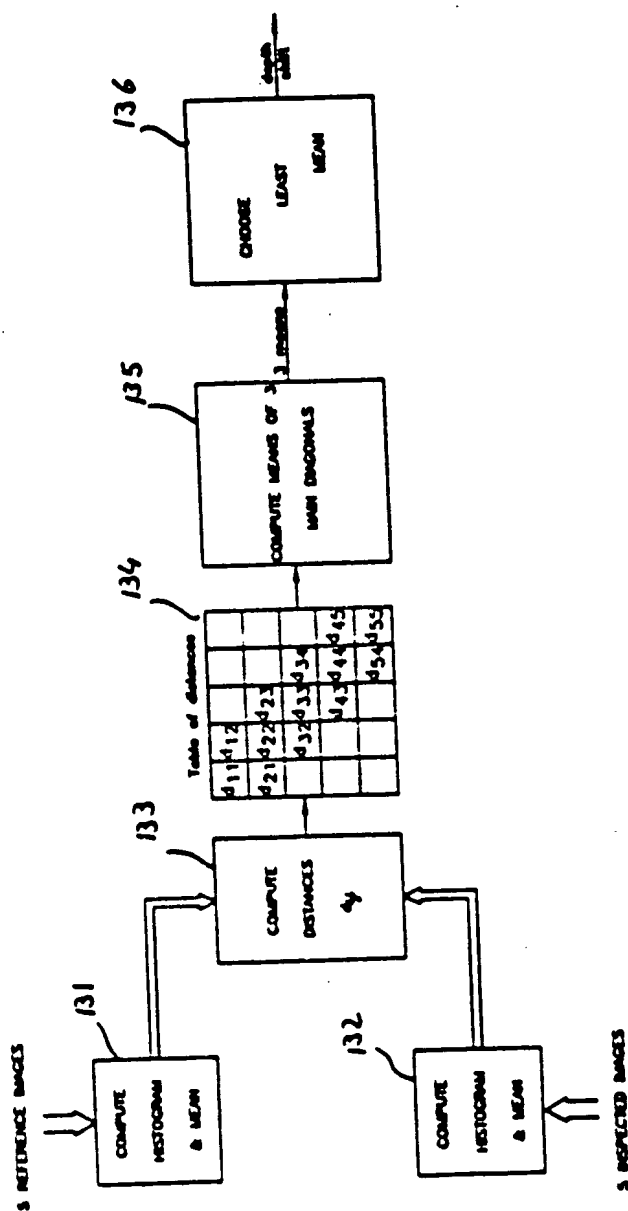
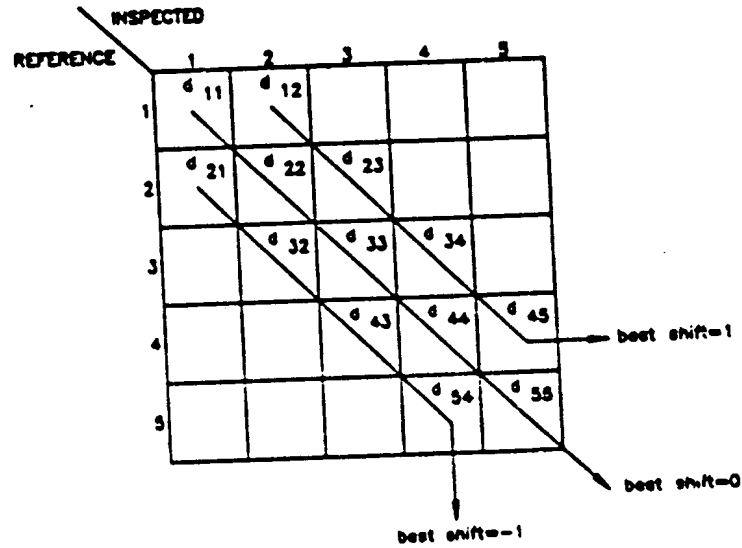
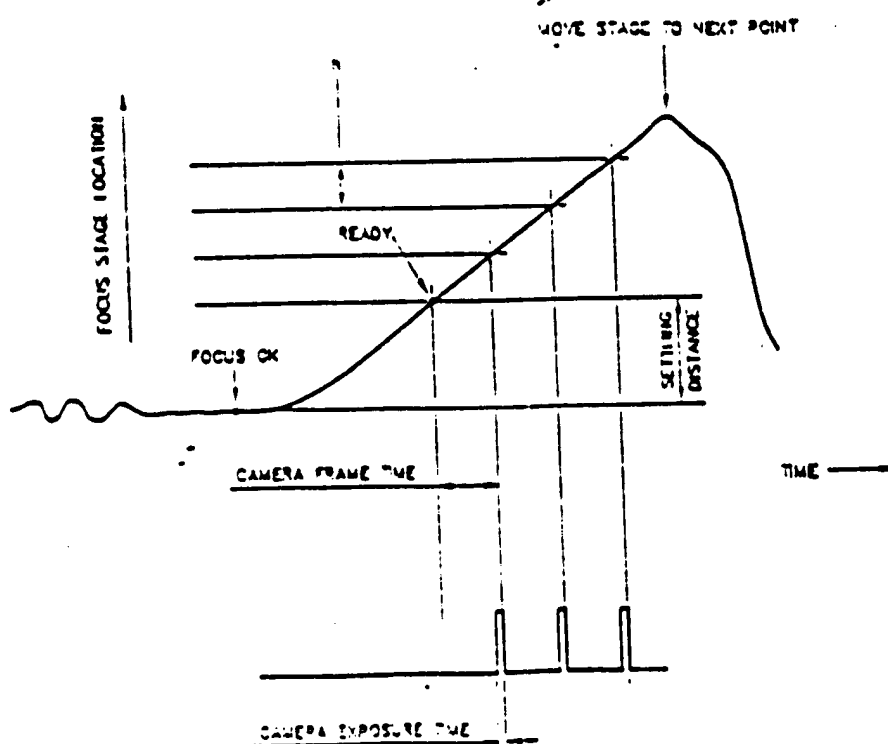
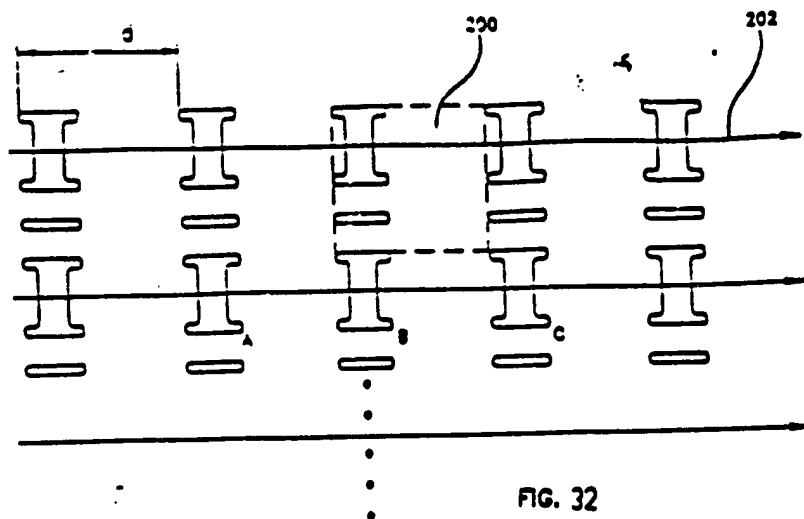


Fig. 30

11/790871

Fig. 31

26E037" 8548680



Phase 1 I.P. OverAll Functional Block Diagram
(Repetitive Pattern Inspection)

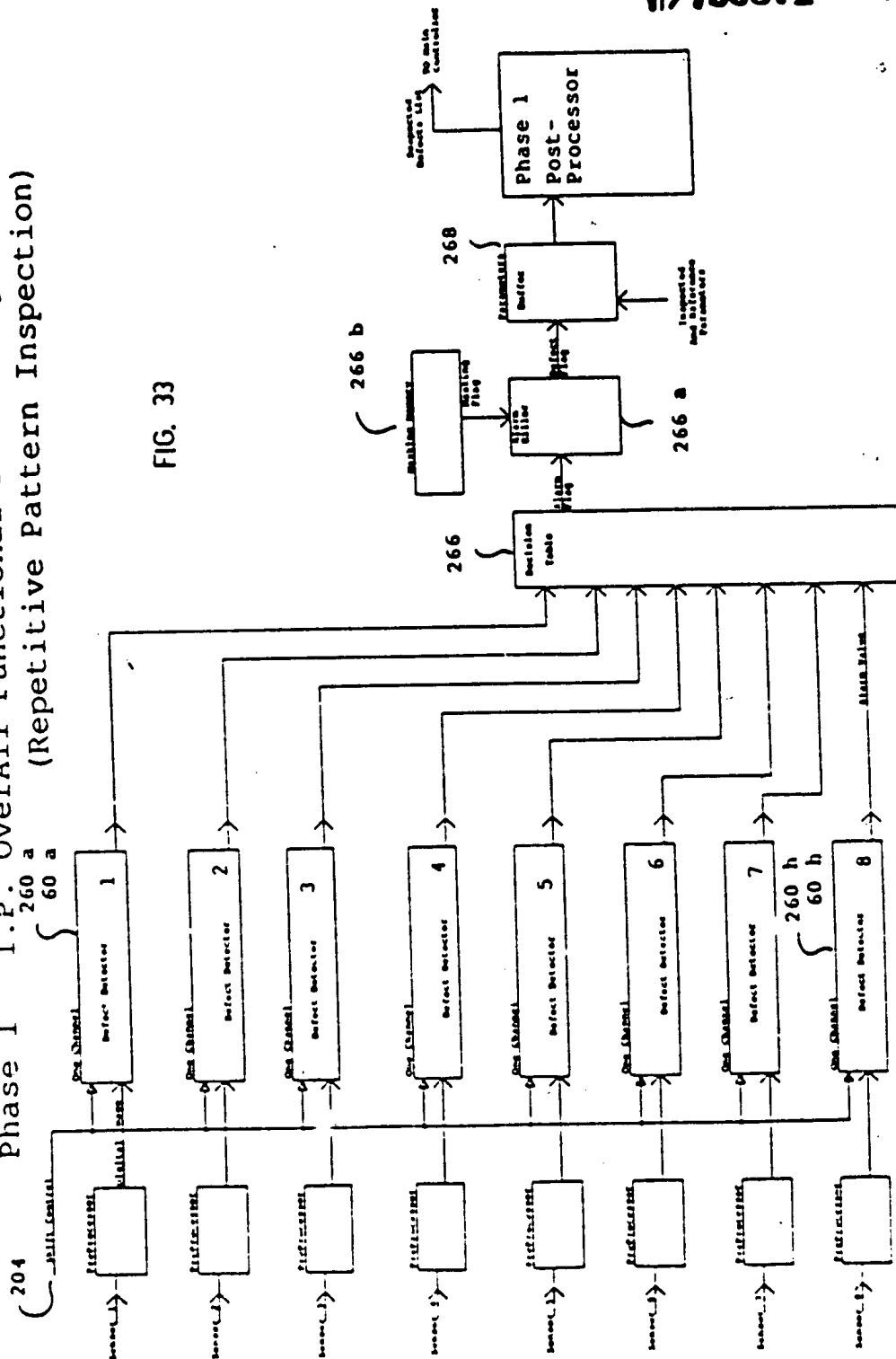


FIG. 33

FIG. 35

The diagram illustrates a threshold processing system, labeled FIG. 35. It is divided into several functional blocks:

- Threshold Processor:** This block contains three sub-components: a "Pixel Threshold Calculator", an "Aligner", and a "Threshold Calculator".
- Character:** This block contains a "Pixel Threshold Calculator", a "Threshold Calculator", and a "Section Type Table".
- Cycle Shifter 76 a:** This block has three inputs labeled (a), (b), and (c), and a single output labeled "Data".
- Comparator:** This block contains a "Section Type Table", a "Threshold Calculator", and a "Data Buffer".

The data flow is as follows:

- Input data enters the "Pixel Threshold Calculator" in the Threshold Processor.
- The output of the "Pixel Threshold Calculator" goes to the "Aligner" in the Threshold Processor.
- The output of the "Aligner" goes to the "Pixel Threshold Calculator" in the Character block.
- The output of the "Pixel Threshold Calculator" in the Character block goes to the "Threshold Calculator" in the Character block.
- The output of the "Threshold Calculator" in the Character block goes to the "Section Type Table" in the Character block.
- The output of the "Section Type Table" in the Character block goes to the "Section Type Table" in the Comparator block.
- The output of the "Section Type Table" in the Comparator block goes to the "Threshold Calculator" in the Comparator block.
- The output of the "Threshold Calculator" in the Comparator block goes to the "Data Buffer" in the Comparator block.
- The output of the "Data Buffer" in the Comparator block goes to the "Data" output of the Cycle Shifter 76 a.
- The output of the "Data" output of the Cycle Shifter 76 a goes to the "Data" output of the system.

Defect Detector Block Diagram (Repetitive Pattern Inspection)

SECRET 85573580

36/41

117790871

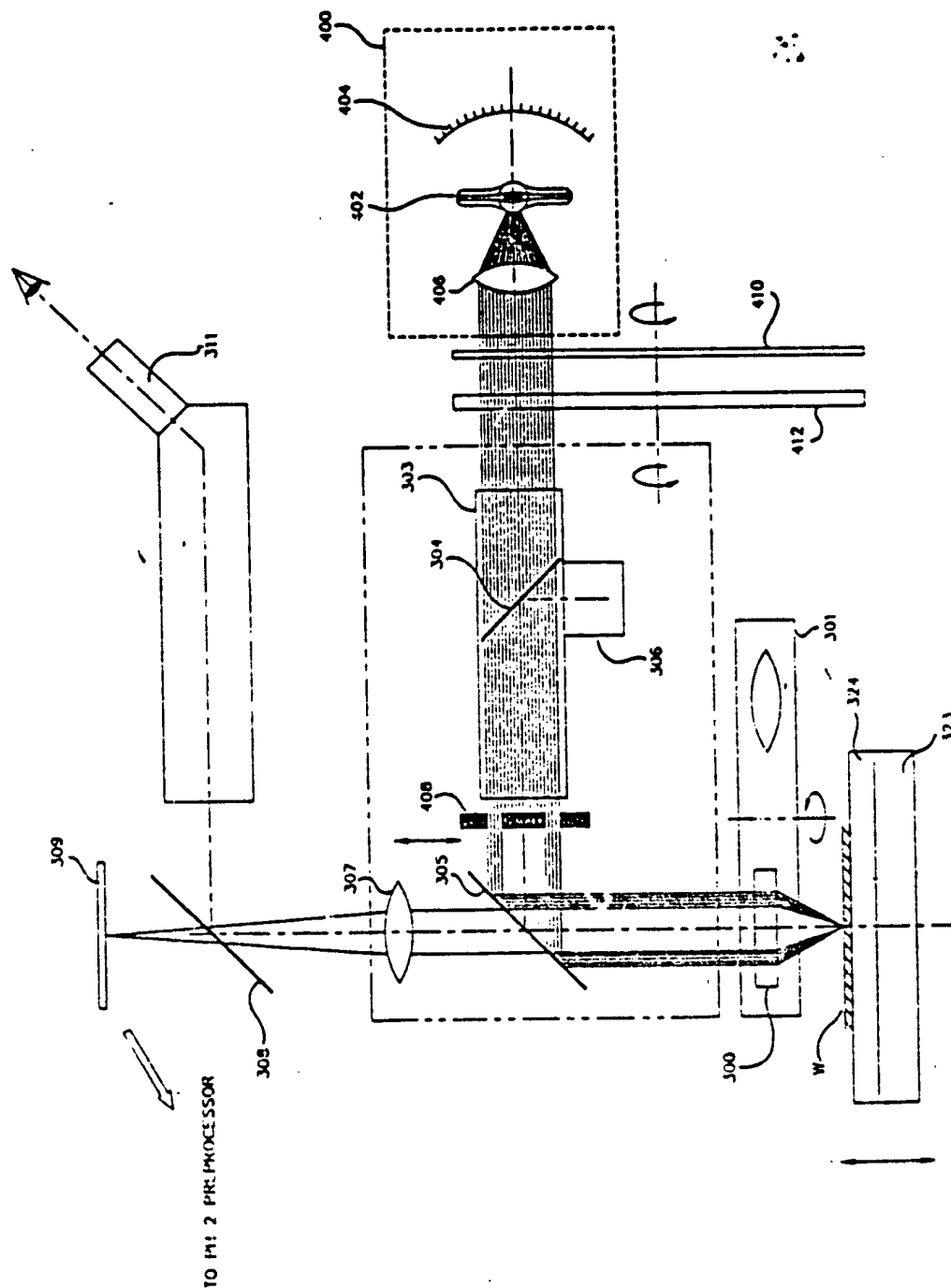


FIG. 36

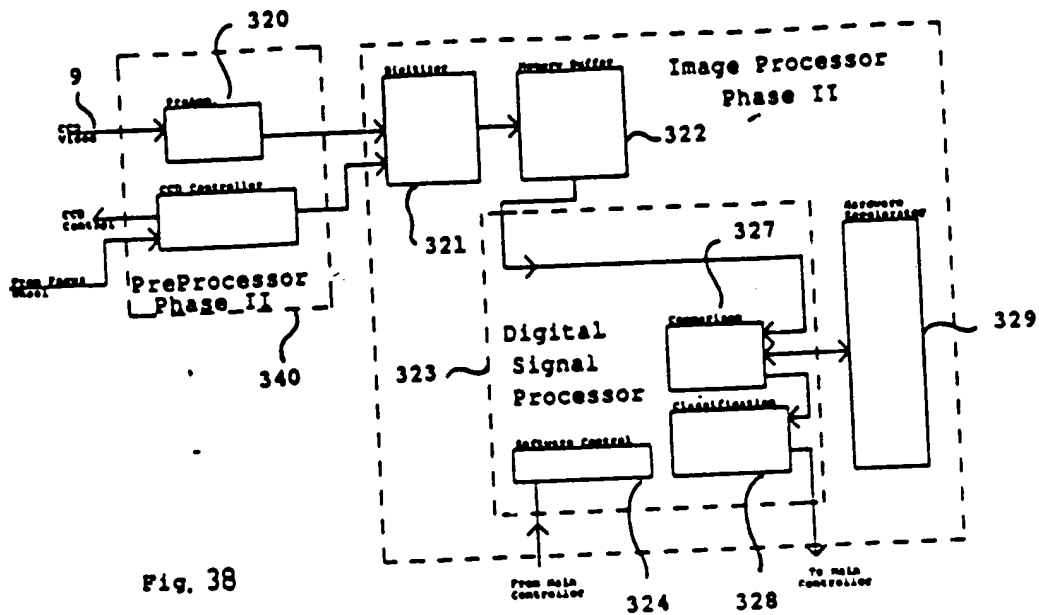


Fig. 38

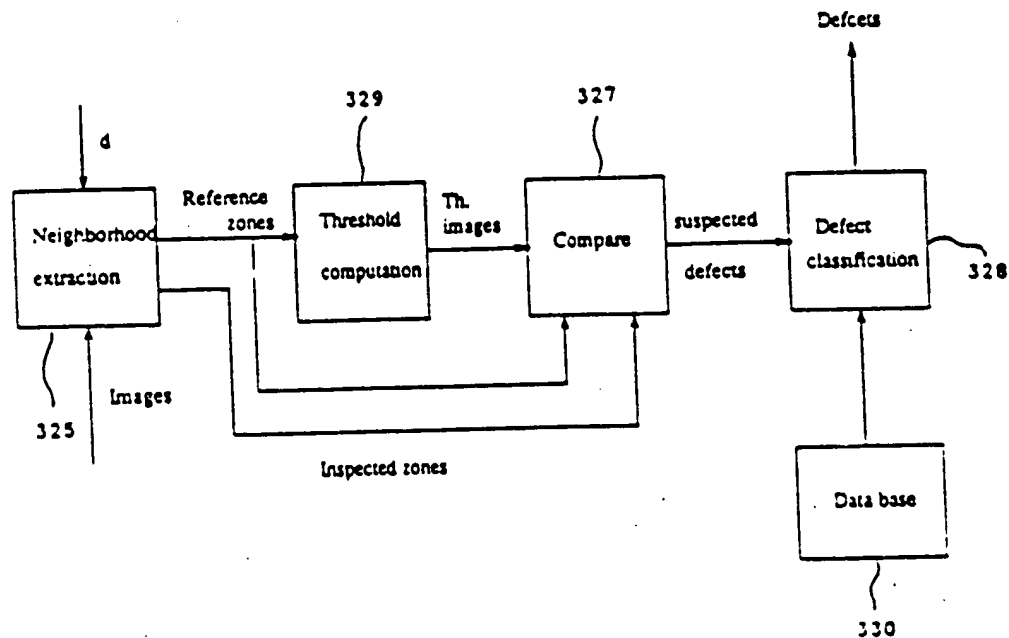


Fig. 39

089458-10397

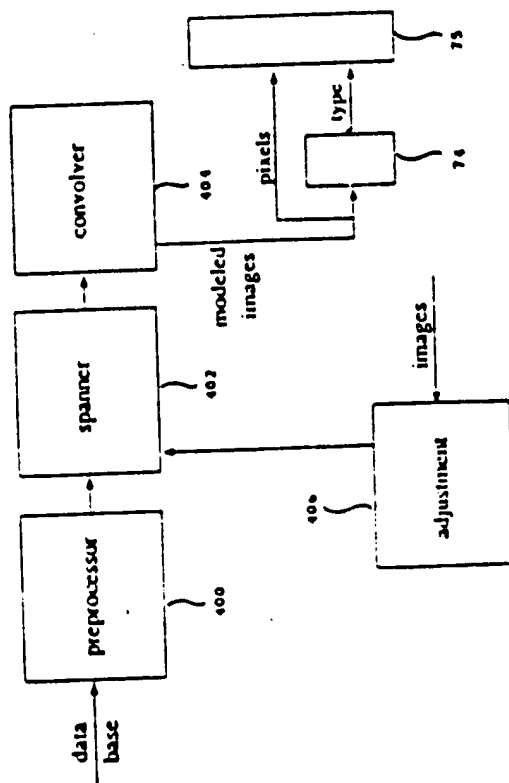
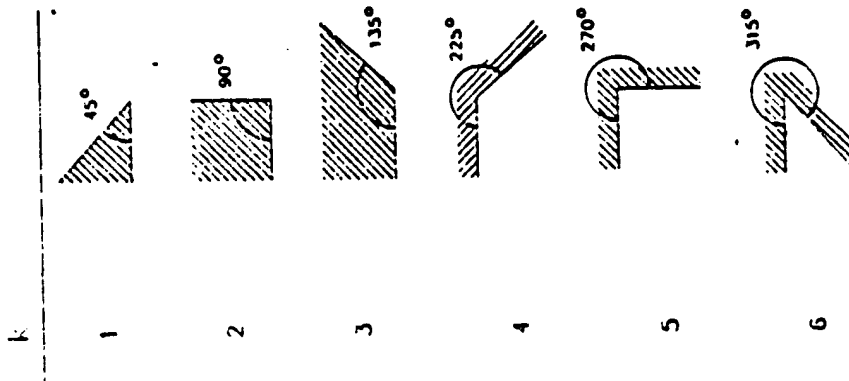


FIG. 40

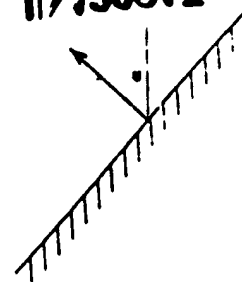
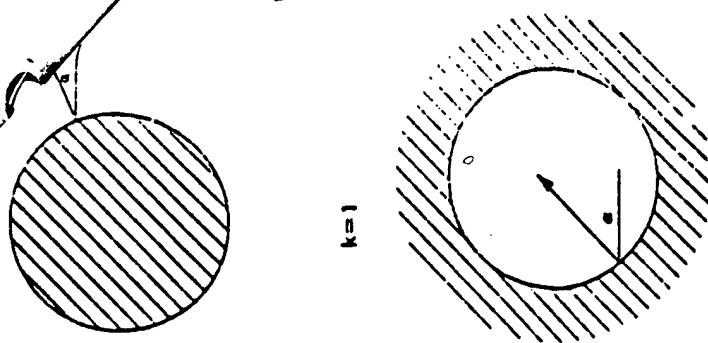


FIG. 42

FIG. 41

k=3

790871

38/41

11/790871

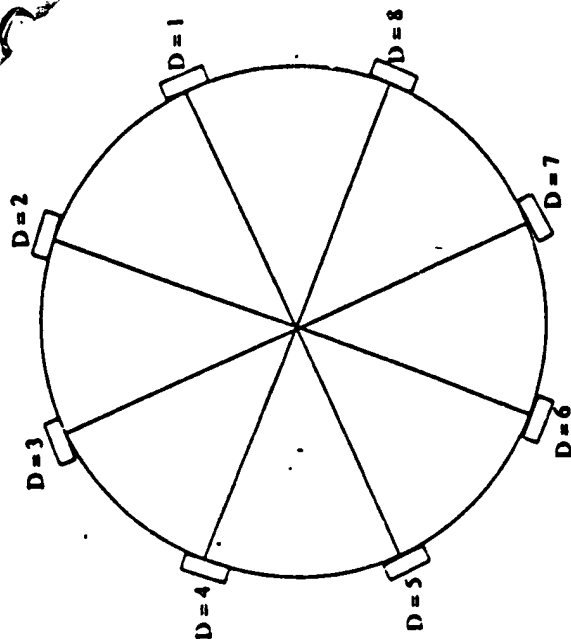
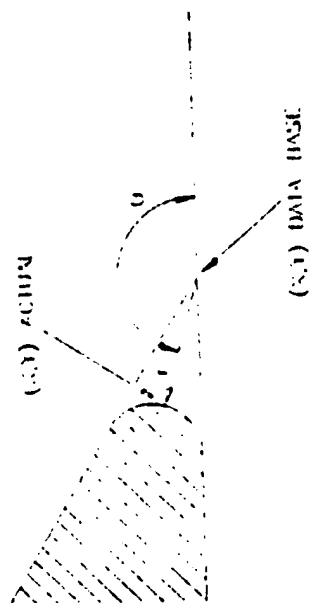


Fig. 43



CORNER SHIFT

FIG. 44

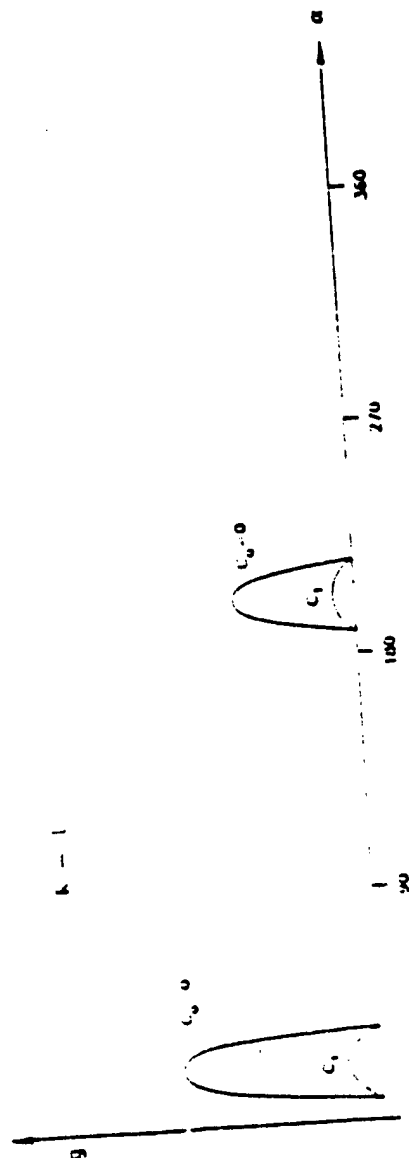


FIG. 45

117790871

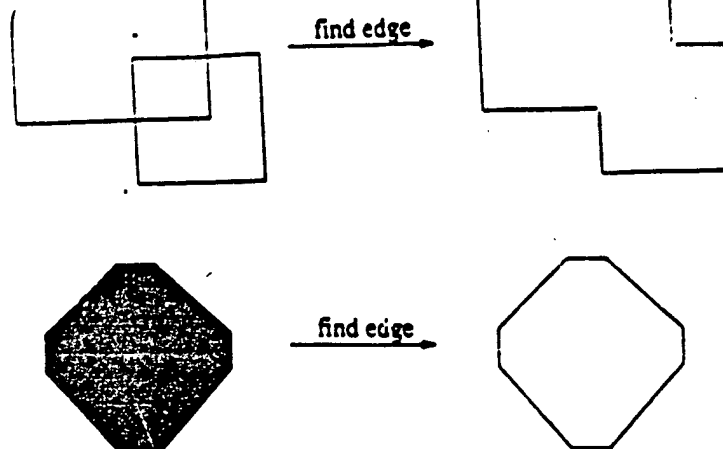


Fig. 46

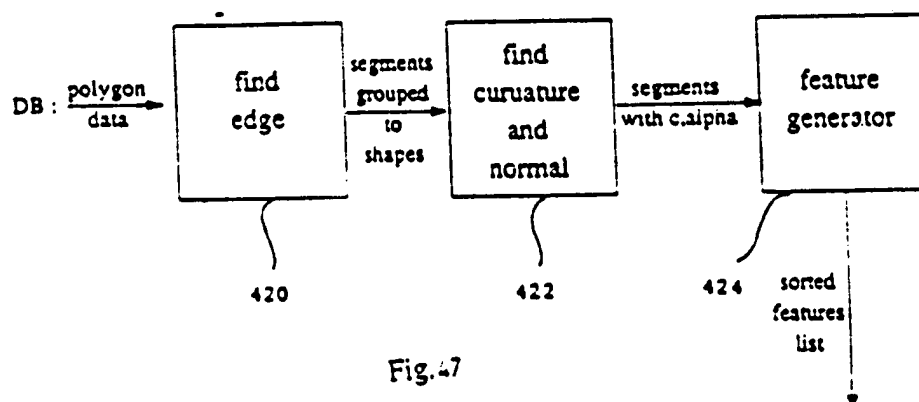


Fig. 47

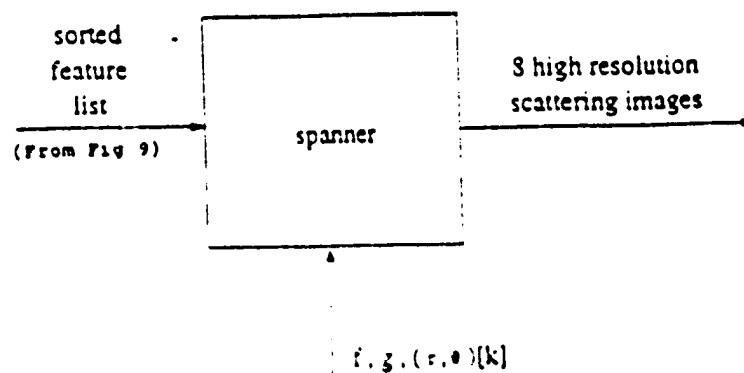


Fig. 48

009458 10097

17790871

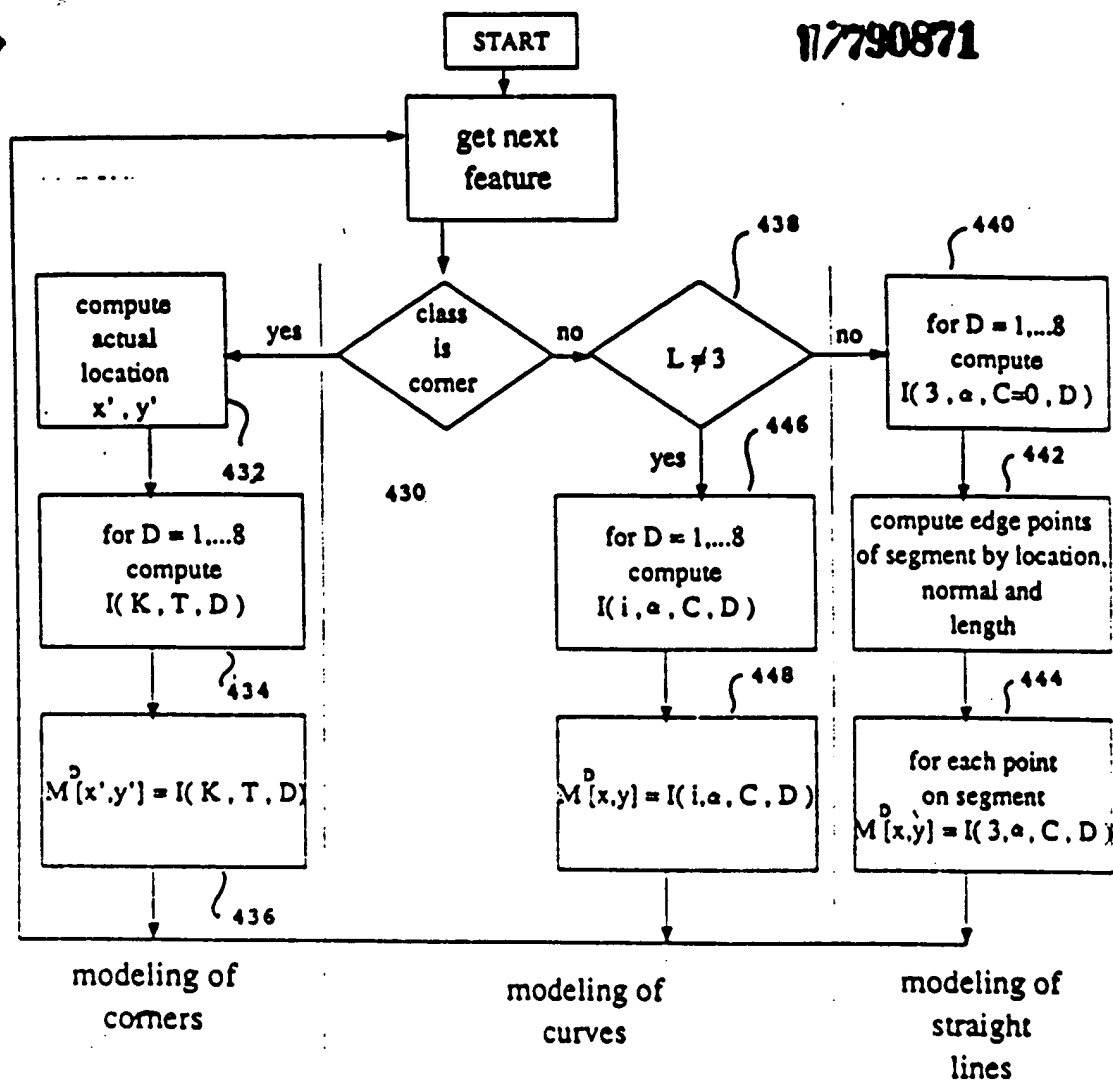


Fig.29 : spanner flow-chart

**This Page is Inserted by IFW Indexing and Scanning
Operations and is not part of the Official Record**

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☒ **BLACK BORDERS**
- ☐ **IMAGE CUT OFF AT TOP, BOTTOM OR SIDES**
- ☒ **FADED TEXT OR DRAWING**
- ☒ **BLURRED OR ILLEGIBLE TEXT OR DRAWING**
- ☐ **SKEWED/SLANTED IMAGES**
- ☐ **COLOR OR BLACK AND WHITE PHOTOGRAPHS**
- ☐ **GRAY SCALE DOCUMENTS**
- ☐ **LINES OR MARKS ON ORIGINAL DOCUMENT**
- ☐ **REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY**
- ☐ **OTHER:** _____

IMAGES ARE BEST AVAILABLE COPY.

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.